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Corresponding Author: Dr. Ágnes Molnár, MD, JD

Corresponding Author's Institution: Faculty of Public Health, Medical and Health Science Centre, University of Debrecen

First Author: Ágnes Molnár, MD, JD

Order of Authors: Ágnes Molnár, MD, JD; Balázs Ádám, MD, PhD; Temenujka Antova, MD, PhD; Luboš Bošák, PhD; Plamen Dimitrov, MD, PhD; Hristina Mileva, MD; Jarmila Pekarcikova Pekarcikova, PhD; Ingrida Zurlyte, MD; Gabriel Gulis, PhD; Róza Ádány, MD, DSc; Karolina Kósa, MD, PhD

Abstract: Marginalized Roma communities in European countries live in substandard housing conditions the improvement of which has been one of the major issues of the Decade of Roma Inclusion, the ongoing intergovernmental European Roma program. The paper presents EU-funded health impact assessments of national Roma housing policies and programmes in 3 Central and Eastern European countries in light of the evaluation of a completed local project in a fourth CEE country so as to compare predicted effects to observed ones. Housing was predicted to have beneficial health effects by improving indoor and outdoor conditions, access to services, and socioeconomic conditions. Negative impacts were predicted only in terms of maintenance expenses and housing tenure. However, observed impacts of the completed local project did not fully support predictions especially in terms of social networks, satisfaction with housing and neighbourhood, and inhabitant safety. In order to improve the predictive value of HIA, more evidence should be produced by the careful evaluation of locally implemented housing projects. In addition, current evidence is in favour of planning Roma housing projects at the local rather than at the national level in alignment with the principle of subsidiarity.

Health impact assessment of Roma housing policies in Central and Eastern Europe: a comparative analysis

Ágnes Molnár¹, Balázs Ádám¹, Temenujka Antova², Lubos Bosak³, Plamen Dimitrov², Hristina Mileva⁴, Jarmila Pekarcikova³, Ingrida Zurlyte⁵, Gabriel Gulis⁶, Róza Ádány¹, Karolina Kósa¹

¹Faculty of Public Health, Medical and Health Science Centre, University of Debrecen, Debrecen, Hungary

²National Center of Public Health Protection, Sofia, Bulgaria

³Faculty of Health Care and Social Work, Trnava University, Trnava, Slovak Republic

⁴Ministry of Health, Sofia, Bulgaria

⁵State Environmental Health Centre, Vilnius, Lithuania

⁶ Unit for Health Promotion Research, University of Southern Denmark, Esbjerg, Denmark

Ágnes Molnár MD, JD

Faculty of Public Health, Medical and Health Science Centre, University of Debrecen

Postal Address: PO Box 2, H-4012 Debrecen, Hungary

Phone: +36 52 460190 ext. 77405

Email: molnar.agnes@sph.unideb.hu

Balázs Ádám MD, PhD

Faculty of Public Health, Medical and Health Science Centre, University of Debrecen

Postal Address: PO Box 2, H-4012 Debrecen, Hungary

Phone: +36 52 460190 ext. 77157

Email: adam.balazs@sph.unideb.hu

Temenujka Antova MD, PhD

National Center of Public Health Protection

Postal address: 15, Ivan Ev.Geshov blvd, 1431 Sofia, Bulgaria

Phone: +359 2 8056200

Email: t.antova@ncphp.government.bg

Luboš Bošák PhD

Department of Public Health, Faculty of Health Care and Social Work, Trnava University

Postal address: 1 Univerzité námesťe, 917 00 Trnava, Slovakia

Phone: +421 335939 402

Email: bosak@centrum.sk

Plamen Dimitrov MD, PhD

National Center of Public Health Protection

Postal address: 15, Ivan Ev.Geshov blvd, 1431 Sofia, Bulgaria

Phone: +359 2 8056200

Email: p.dimitrov@ncphp.government.bg

Hristina Mileva MD

Ministry of Health

Postal address : 5 Sveta Nedelya Square, 1000 Sofia Bulgaria

Phone: +359-2-9811833

Email: hmileva@yahoo.com

Jarmila Pekarcikova PhD

Department of Public Health, Faculty of Health Care and Social Work, Trnava University
Postal address: 1 Univerzitné námestie, 917 00 Trnava, Slovakia
Phone: +421 335939 402
Email: jkorcova@truni.sk; jarmiko@yahoo.com

Ingrida Zurlyte MD

State Environmental Health Center
Postal address: Kalvariju str. 153, 08221 Vilnius, Lithuania
Phone: +370 5 2360 481
Email: ingrida@post.omnitel.net
(present affiliation: Centre for Health Educaiton and Disease Prevention)

Gabriel Gulis PhD

Unit for Health Promotion Research, University of Southern Denmark
Postal address: Niels Bohrs Vej 9, 6700 Esbjerg, Denmark
Phone: +45 6550 4212
Email: GGulis@health.sdu.dk

Róza Ádány, MD DSc

Faculty of Public Health, Medical and Health Science Centre, University of Debrecen
Postal Address: PO Box 2, H-4012 Debrecen, Hungary
Phone: +36 52 460190 ext. 77148
Email: adany.roza@sph.unideb.hu

Karolina Kósa MD, PhD

Faculty of Public Health, Medical and Health Science Centre, University of Debrecen
Postal Address: PO Box 2, H-4012 Debrecen, Hungary
Phone: +36 52 460190 ext. 77430
Email: karolina.kosa@sph.unideb.hu

Corresponding author:

Ágnes Molnár
Faculty of Public Health
Medical and Health Science Centre
University of Debrecen
Kassai 26/b, H-4012 Debrecen PO Box 2, Hungary
Phone: +36 52 460 190 ext. 77405
Fax: +36 52 417 267
Email: molnar.agnes@sph.unideb.hu

Highlights

- Predictive validity of HIA of national Roma housing policies – in light of current evidence – is low.
- Implemented housing projects should be comprehensively evaluated to improve reliability of HIA.
- Roma housing projects should be planned at the local rather than at the national level.
- HIA should be used to plan Roma housing projects at the local level.

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Abstract

Marginalized Roma communities in European countries live in substandard housing conditions the improvement of which has been one of the major issues of the Decade of Roma Inclusion, the ongoing intergovernmental European Roma program. The paper presents EU-funded health impact assessments of national Roma housing policies and programmes in 3 Central and Eastern European countries in light of the evaluation of a completed local project in a fourth CEE country so as to compare predicted effects to observed ones. Housing was predicted to have beneficial health effects by improving indoor and outdoor conditions, access to services, and socioeconomic conditions. Negative impacts were predicted only in terms of maintenance expenses and housing tenure. However, observed impacts of the completed local project did not fully support predictions especially in terms of social networks, satisfaction with housing and neighbourhood, and inhabitant safety. In order to improve the predictive value of HIA, more evidence should be produced by the careful evaluation of locally implemented housing projects. In addition, current evidence is in favour of planning Roma housing projects at the local rather than at the national level in alignment with the principle of subsidiarity.

Key words: health impact assessment, HIA, Roma, housing, healthy public policy

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1. Introduction

The right to adequate housing is a universal right, recognized by international and European declarations, treaties and national constitutions. The revised European Social Charter contains specific provisions on the right to housing (Council of Europe, 1996). Recommendations on the implementation of this right was recently issued by the Council of Europe specifying that an adequate dwelling must be structurally and legally secure, safe from a sanitary and health point of view and in possession of all basic amenities. Housing conditions should also comply with requirements on size, surroundings and the location of the dwelling in relation to work, school and social services (Council of Europe, 2009).

Considerable evidence supports the notion that adequate housing is related to health and that low quality of housing is associated with higher environmental risks and worse health status. Social status and low income in particular are strongly linked to substandard housing and increased exposure to environmental risks at home or at the residential location outdoors (Evans and Kantrowitz, 2002, Rauh et al., 2008, Braubach and Fairburn, 2010). This evidence has special importance for the European Roma community constituting the largest ethnic minority of the EU estimated at 10-12 million.

The majority of Roma people in Central and Eastern European countries have been experiencing great difficulties – among others – in terms of adequate housing due to the high costs of housing relative to their income and the low availability of social housing that results in considerably worse living conditions of Roma compared to the average for the country, and their segregation in separate neighborhoods (European Roma Rights Centre, 2010). This situation jeopardizes the health of Roma (Vozarova et al., 2003; Zeman et al., 2003; Sepkowitz, 2006), poses great challenges to their integration, and is destructive to the social cohesion and well-being of European societies.

Health impact assessment of Roma housing policies in Central and Eastern Europe: a comparative analysis

Recognition of this problem led to a major European initiative with 12 participating countries titled “Decade of Roma Inclusion” for the period of 2005-2015 bringing together governments, intergovernmental and nongovernmental organizations as well as Romani civil society. The social inclusion of Roma was planned to be achieved through four priority areas, including housing besides education, employment, and health (Decade of Roma Inclusion, 2005). EU Member States of the Decade with sizeable Roma populations developed specific action plans with legislation and accompanying administrative acts but without the use of available decision aiding tools, such as health impact assessment (HIA), a powerful tool to express an explicit value judgement on health by supporting health oriented decision-making (Cashmore et al., 2010). The application of HIA in decision making has been lagging behind in new member states of the EU which led to the initiation of an EU-funded project titled “Health Impact Assessment in New Member States and Pre-Accession Countries” in which 7 countries joined to build HIA networks and to strengthen national capacities for carrying out HIAs in various fields. One such field was on policies regarding vulnerable populations of which the workgroup specified housing policies for Roma in four Central European countries (Bulgaria, Hungary, Lithuania and Slovakia). The comparative analysis of HIAs on housing policies aimed at Roma constitutes the topic of this paper.

2. Housing of marginalized Roma in the participating countries

The largest minority of Europe, the Roma have been multiply disadvantaged, such as in terms of housing in many European countries, among them the 4 states included in the analysis. The limited financial means of Roma usually preclude access to market-based housing, and considerable shortage of social housing in countries where their proportion is highest is an additional barrier to adequate living conditions. It follows that many of them are forced to use makeshift housing that is substandard or unacceptable, legally insecure, and, in

Health impact assessment of Roma housing policies in Central and Eastern Europe: a comparative analysis

many cases, segregated. Poverty and discrimination may be compounded by loss or lack of official personal identification documents that prevents access to other services as well (European Union Agency for Fundamental Rights, 2009; European Roma Rights Centre, 2010).

2.1. Bulgaria

370 thousand Roma live in the country according to census but estimates of minority advocacy groups put the numbers at 500-800 000 (Ringold et al., 2005; United Nations Development Programme, 2006). They are dispersed evenly throughout Bulgaria, more than half of them living in so-called mahalas or ghetto-like neighbourhoods of extremely substandard living conditions in urban centres. Most of the rest live in poor, isolated Roma villages scattered all over the country. Housing in segregated Roma neighbourhoods is one of the greatest social problems in Bulgaria. Illegal construction accounts for up to 80% of all construction in urban neighbourhoods and has been rising as a result of Roma migrating from rural areas to big cities. Illegal connection to electricity, water mains and sewage system has been widespread in these areas (Vassilev, 2004). Housing conditions in terms of hygiene and sanitation are poorest in the rural areas. According to the results of a national representative survey, 30% of rural households live in buildings that need urgent repair of the sewage system, roofs, electricity network, etc. In addition, one out of five households resides in a dwelling unit that is in extremely poor condition, in danger of becoming uninhabitable unless repaired within the next 4 to 5 years (The World Bank and Vitosha Research, 2001).

2.2. Lithuania

2,571 Roma lived in Lithuania in 2001 according to census data, representing 0.07 percent of the total population of Lithuania. However, estimates of the Minority Rights Group set the

Health impact assessment of Roma housing policies in Central and Eastern Europe: a comparative analysis

number of Roma living in Lithuania at 3,000-4,000 (Kueinskaite 2002). They live in many different parts of the country, but large communities can be found in Vilnius, Kaunas, Šiauliai and Panevėžys. According to the – so far unaccepted – draft of the National Programme on Roma Integration into Lithuanian Society 2010-2012, data on Roma housing quality in the country are not available. The Roma settlement in the Kirtimai area of the capital (Vilnius) is home to the largest Roma community with 511 inhabitants, 146 of them being children. They live in 99 illegally constructed buildings on municipality-owned land which do not meet basic construction standards. Dwellings are poor and overcrowded, there are no paved roads, and due to the absence of sewage system in this area, water in the public pumps often becomes non-potable after heavy rains (Kueinskaite, 2002). A shortage of social housing prevented the municipality from solving the housing problem of the community, in spite of recommendations of the ECRI (European Commission against Racism and Intolerance, ECRI, 2006).

2.3. Slovakia

The last census recorded a little less than 90 thousand Roma in the country, whereas minority organizations estimate the country's Roma population at 420,000 to 500,000 Roma, accounting for 8 to 10 percent of the population (The World Bank Foundation et al., 2002). A socio-graphic mapping of Romany communities in Slovakia was commissioned by the government in 2003 to gain reliable data on the Roma communities, and identify and assess their needs. The mapping revealed that whilst Roma were integrated in approximately 50% of all 1575 identified Roma settlement units, the remaining 787 settlements were considered non-integrated communities. Of these, a further 149 settlements were classified as segregated, that is, located at the edge or outside of villages and towns with no access to running water and with the percentage of illegal dwellings in excess of 20% (Socio-Graphic Surveying of Roma Communities in Slovakia, 2003).

2.4. Hungary

As opposed to the 190 thousand Roma who identified themselves in the last census, estimates put their numbers at 520-650 thousand (Kemény et al., 2004). Many Roma live in segregated conditions ('colonies'). A survey carried out by the National Public Health Service in 2003-2004 identified 767 Gypsy colonies on 530 settlements with 138 000 inhabitants in Hungary. The hygienic situation was deemed to be unacceptable at most of them due to hygienically neglected dwellings, the occurrence of rodents and unvaccinated stray dogs, lack of piped water in 26% of colonies, and illegal waste deposits and animal carcass deposits at more than 10% of the colonies (Ungváry et al., 2005). Another environmental survey of segregated habitats commissioned by the Ministry of Environmental Health and carried out by an academic institution with a network of Roma field workers between 2000 and 2005 revealed that approximately 134 000 Hungarians lived in 758 substandard, segregated habitats (colonies) mostly in the north-eastern part of the country, and 94% of all colonies were populated dominantly by Roma. The most frequent environmental problems in these colonies were found to be lack of sewage and gas mains, garbage deposits, waterlogged soil, and lack of water mains (Kósa et al., 2009).

3. Material and methods

3.1. Choosing the housing initiatives for analysis

Several Roma housing strategies or programmes were examined in Bulgaria, Hungary and Slovakia, of which the national Roma housing programmes of the Decade of Roma Inclusion were chosen by country teams for further assessment (Bulgarian Council of Ministers, 2004;

Health impact assessment of Roma housing policies in Central and Eastern Europe: a comparative analysis

Government of the Slovak Republic, 2005; Hungarian Ministry of Youth, Family, Social Affairs and Equal Opportunities, 2006). Since no comprehensive policy on Roma housing was formulated by the Lithuanian government at the time of the study (2005), the municipal level programme of the capital (Vilnius) focusing on one Roma community in the city (Kirtimai) was chosen for assessment by the Lithuanian team (Council of Vilnius City Municipality, 2005).

Table 1 gives an overview of the selected programmes in terms of aims, target groups, budget and timeframe.

Table 1

Prospective health impact assessments of the selected programmes in Bulgaria, Lithuania and Slovakia were carried out in order to predict potential health impacts of housing policies. In Hungary, the first round of the national model programme of Roma housing had already been ongoing at the time of the study. Thus, the Hungarian team decided to carry out a retrospective HIA for one location (colony) out of the then nine included in the national programme. 4 years later, an evaluation of the project at this particular location was carried out, results of which were published elsewhere (Molnár et al., 2010). In this paper, the retrospective HIA and evaluation of the Hungarian project was used only as a reference base to judge the accuracy of the predictions of prospective HIAs in light of which recommendations were refined for future prospective HIAs.

3.2. The applied model of health and methods of HIA

Our HIAs are based on the broad model of health according to which basic prerequisites, such as shelter, education, social justice and equity, among others, determine population health (WHO, 1986). Methods of HIA as spelled out in the Gothenburg Consensus Paper and the European Policy Health Impact Assessment Methodology were applied adopting a

Health impact assessment of Roma housing policies in Central and Eastern Europe: a comparative analysis

participative, multidisciplinary and intersectoral approach to assess health impacts (European Center for Health Policy and WHO, 1999; European Commission, 2005).

The standard procedure of carrying out HIAs was applied; that is, screening was followed by scoping, risk appraisal and reporting with recommendations for policy decisions. HIA process was evaluated by the HIA teams and external experts.

3.2.1. Data collection

Data were collected from official sources; policy documents were reviewed and fieldwork was carried out to gain reliable information from the affected communities. Decision makers of relevant ministries and public authorities (based on availability and willingness), health professionals and community members were interviewed during workshops and personal interviews or were surveyed by questionnaires. Evidences from the published and grey literature were also collected. Methods of data collection are detailed in Table 2.

Table 2

4. Results

4.1. Screening

Screening was carried out to investigate features of the chosen programmes debating the probability, direction and magnitude of health impacts on Roma communities in terms of main health determinants. The preliminary analysis of programmes identified three main categories of interventions, namely administrative measures, housing development and supplementary measures targeting lifestyle, employment, education and access to services as described in Table 3.

Table 3

Health impact assessment of Roma housing policies in Central and Eastern Europe: a comparative analysis

As a result of screening, administrative measures built on clearly defined principles concerning allocation of dwellings and selection of beneficiaries were considered as a precondition for housing developments with indirect positive impacts on health determinants. In addition, infrastructural developments were predicted to have direct positive effects on health with some uncertain consequences, such as the impact of increased expenses, worthy of further assessment. Supplementary measures aimed at the improvement of various socio-economic, lifestyle and other determinants were expected to enhance the positive health effects.

Due to differences in selected policies in terms of measures and administration levels, a quite broad spectrum of determinants was designated for detailed assessment by the participants. The main categories of determinants for risk appraisal were identified to be indoor and outdoor conditions, socio-economic determinants, access to and quality of health services, and lifestyle.

4.2. Scoping

Steering groups involving researchers, stakeholders, and decision makers were formed in each country during the scoping step to set boundaries of the assessment and to formulate Terms of Reference for the HIA.

4.3. Appraisal of health effects

4.3.1. Physical environment

4.3.1.1. Indoor conditions. Improved housing conditions have important benefits on health status. Adequate indoor air quality, temperature and lack of dampness have positive health consequences in terms of cardiovascular, malignant and respiratory diseases, particularly

Health impact assessment of Roma housing policies in Central and Eastern Europe: a comparative analysis

amongst children and elderly people (Gemmell, 2001; Krieger and Higgins, 2002; Thomson et al., 2003; Gao et al., 1987). Decreased crowdedness, elimination of rodents and parasites may contribute to a decreased rate of infectious and allergic diseases, as well as improved mental health (Huss et al., 1994; Kane et al., 1999). Improved housing design is expected to improve safety and decrease the number of accidents at home; indoor electricity and safe domestic appliances may reduce burn accidents due to the use of inflammable substances for cooking and lighting (Peck et al., 2008).

4.3.1.2. Outdoor conditions. Segregated and/or substandard housing complexes, in many cases, can be recognized by their unsightly characteristics featured by illegal waste dumps, abandoned cars, or broken windows (Bullard, 1983; Cohen et al., 2000). Properly designed housing projects address these problems, as well: soil and water quality will be improved due to decreased industrial pollution, whereas human and animal contamination will decrease due to installation of public sanitation and sewage draining systems. Rehabilitation of urban centres or removal of communities from industrial areas may have beneficial impact on the consequences of air pollution and road traffic accidents. A planned settlement structure with safer road network and green spaces provides a better quality of living environment, increased level of safety and health.

4.3.2. Access to and quality of services

One reason, among others, for the inadequate access of Roma to health care is their geographical isolation and/or lack of proper roads on the margins of urban settlements or in remote rural areas (European Roma Rights Centre, 2006). Positive impact on the access to health services subsequent to housing development can be due to better contact with helping agencies, easier and more frequent contact with GPs, and improved conditions for house calls.

Health impact assessment of Roma housing policies in Central and Eastern Europe: a comparative analysis

Improved physical access to urban centers will facilitate access to other public services as well, such as educational and administrative facilities, fire service, police, etc.

4.3.3. Socio-economic environment

Individuals of higher socio-economic status are healthier and live longer than those of lower status. This holds true regardless of whether income or education are used as indicators of socioeconomic status (Canadian Public Health Association, 2001; Wilkinson and Marmot, 2003; CSDH, 2008). Therefore, any intervention that has an impact on education, income or employment is likely to have an indirect impact on health.

4.3.3.1. Education. Inhabitants of segregated settlements are much less likely to have completed primary and especially secondary education due to the above mentioned geographical isolation and difficulties in accessing urban centres, low quality segregated schools with inadequately qualified staff, and other factors, for example difficulties doing homework because of lack of electricity, crowdedness, etc (European Union Agency for Fundamental Rights, 2009). School attendance is expected to be improved among children with easy access to school; performance can be predicted to improve if conditions for studying at home improve based on earlier studies showing positive relationship between housing conditions and improved intellectual capacity in childhood (Choudhary et al., 2002).

4.3.3.2. Employment. Adults living in segregated housing sites have difficulties to find work locally, fewer opportunities to learn about potential work, and limited access to use public transport to get to work. There are even examples of employer discrimination based on the permanent address of the candidate, that is, the rejection of people who live in certain neighborhoods as a group (Bogdanov and Angelov, 2006). Improved housing may improve access to urban centres and more frequent use of means of public transport through which

Health impact assessment of Roma housing policies in Central and Eastern Europe: a comparative analysis

increased employment and probable improvements in health may be predicted. In addition, work opportunities can be created during the housing project for adult beneficiaries.

4.3.3.3. Income. Increased income has an indirect positive impact on health. However, income is necessarily linked to employment and should be taken into account when selecting beneficiaries for housing projects. Household maintenance requires a certain level of disposable income: the higher the quality of the home with more utilities, the higher the expenses. Improvement in housing may bring negative consequences depending on the poverty level and housing expenses that are predicted to increase after a housing development project (Thomson et al., 2001). Sustained improvements in health can be expected only if the income of beneficiary households is commensurate with the expenses of home maintenance.

4.3.3.4. Social network and inclusion. Discrimination and racial harassment against the Roma community fundamentally determines their well-being in housing development projects. Desegregation and inclusion might be facilitated either by relocating Roma families to neighborhoods in which the majority of inhabitants are non-Roma, or by encouraging non-Roma to move to areas with predominantly Roma people (Bogdanov and Angelov, 2006). Housing projects are expected to have positive impact on occurrence and fear of crime with important benefits for mental health, physical functioning and quality of life (Stafford et al., 2007; Chandola, 2001; Ross and Mirowsky, 2001). Housing development potentially results in numerous additional beneficial health effects through strengthened social network and emotional safety, which may reduce stress (Lahelma et al., 2004). Improved conditions of leisure and recreation were also found to have beneficial effects on coping with stress (Iwasaki 2006). All these factors may lead to improved mental health and a greater sense of security and belonging, which increase the social capital of the community resulting in lower rates of ill

Health impact assessment of Roma housing policies in Central and Eastern Europe: a comparative analysis

health and mortality (Pickett and Pearl, 2001; Curtis and Rees-Jones, 1998). However, in case of relocation to a new area, mental health can also deteriorate if the accompanying stress and loss of community is not addressed by the establishment of new social ties (Thomson et al., 2003).

4.3.4. Lifestyle

Case studies have not found explicit connection between improved living conditions and change of risk behaviour, such as smoking or alcohol consumption. Due to targeted measures aiming at the reduction of drug use in case of the Lithuanian policy, drug abuse and related health consequences will probably change for the better. Certain beneficial health effects on nutrition can be predicted due to better cooking and storage conditions. Coping with stress is predicted to improve due to adequate living conditions, which consequently results in advanced mental health (Krieger and Higgins 2002; Thomson et al., 2001).

In summary, the prospective HIAs of housing interventions aimed at Roma at the strategic or programme level in 3 Central-Eastern European countries demonstrated numerous positive and some negative health effects. Positive impacts were predicted in terms of indoor and outdoor living spaces as well as access to services. Positive impacts were estimated regarding socio-economic determinants such as employment, education, social networks, and housing satisfaction. Uncertain (positive or negative) effects were predicted only for housing tenure, expenses, and social networks.

The predicted health impacts of the prospective HIAs were compared to the experienced ones based on the evaluation of a local project implemented in Hungary (Molnár, 2010). Table 4 summarizes the predicted impacts in contrast to observed ones.

Table 4

The most important positive impacts predicted on indoor housing conditions, improved education and housing tenure were supported by the evaluation of the Hungarian

Health impact assessment of Roma housing policies in Central and Eastern Europe: a comparative analysis

implemented project. Unexpected negative impacts were related to social networks, satisfaction with housing and neighbourhood satisfaction, housing expenses and safety. Unequivocal improvements in terms of health could not be proven in the Hungarian case.

5. Discussion

Our analysis of prospective HIAs in comparison with the evaluation of an implemented local housing project in Hungary demonstrated that predicted and observed health impacts of housing policies differed in several aspects. Prospective HIAs of housing interventions aimed at Roma at the strategic or programme level had low predictive validity in terms of mostly one domain: uncertain or unexpected negative impacts occurred mostly regarding socio-economic determinants of health.

This can be explained first by the fact that specific housing needs of ethnic minority groups and the features of such communities, like community structure, family relationships, resources, and expectations of the beneficiaries are diverse and cannot be well understood by national decision makers. Providing benefits to a deprived community will inevitably lead to strifes about the questions of who gets what, when, and how, just as it has been well-recognized in majority groups (Lasswell, 1958). Lack of intimate knowledge and participation of the beneficiary community makes proper planning close to impossible and leads to a host of unforeseeable difficulties if the improperly planned project is nevertheless implemented (Molnár, 2010).

Second, the reliability of health impact assessments depends on available evidence regarding the impact of executed interventions. Our multi-country analysis can be considered a pioneering work since no previous HIA on national policy for Roma housing has been available in the literature. Consequently, our analysis was impeded by a shortage of evaluated housing projects focusing on Roma populations, and this is even more true for the health impacts of such projects. Baseline data at the launch of housing projects usually include only

Health impact assessment of Roma housing policies in Central and Eastern Europe: a comparative analysis

demographic, socio-economic and environmental data and no information on health issues.

Governmental evaluations, if any, focus on the output and process rather than on health impacts or quality of life. Collecting health information is compounded by data protection issues among minorities.

Available evaluations of Roma programmes on housing proved, at least, equivocal results.

- Evaluations of the *Bulgarian* governmental housing programme showed that initiatives were not accompanied with economic integration, and centrally planned construction of dwellings increased segregation by the establishment of entirely Romani residential districts. Other sources described budget allocations for social housing in Romani communities as insufficient and accused the national and local governments in Bulgaria of mispending the funds for private commercial gains (DecadeWatch, 2007). No wonder that this programme failed to sustainably improve housing conditions for Roma (DecadeWatch, 2007; Council of Europe, 2006; Open Society Institute, 2009).
- Implementation of the *Slovak* national housing concept was limited to small scale interventions; and information on their effectiveness is only available from NGOs (DecadeWatch, 2007; Milan Simecka Foundation, 2008; European Roma Rights Centre, 2009). While the housing development programme in general improved the living conditions of Roma according to one study, it maintained or even aggravated segregation. The results also showed that in many cases the new dwellings lacked minimal technical infrastructure (shower-bath, heating system), etc., and were of poor quality in terms of used materials and construction (Milan Simecka Foundation, 2008).
- Evaluation of the effectiveness of the *Lithuanian* housing programme was delegated to a workgroup at municipality level after several complaints filed by the Roma community to the Parliament of Lithuania. According to the report of an NGO, main problems were due to uncertainty as to which municipal department was responsible for implementing the programme, and lack of allocated resources for the programme (Centre of Ethnic Studies

Health impact assessment of Roma housing policies in Central and Eastern Europe: a comparative analysis

Institute for Social Research, 2009). At present, apartments are rented for 18 Roma families, whereas about 40 self-identified Roma families have been on the waiting list for social housing in Vilnius city (Vilnius Municipality, unpublished document, 2011).

- The *Hungarian* Roma housing programme should have been evaluated according to the framework and indicators specified in the Strategic Plan of the programme. However, available governmental documents failed to give a proper evaluation. A 2008 report of the National Court of Auditors claimed the lack of rational use of resources (National Court of Auditors, 2008).

These experiences probably fed into the emergence of a European platform for Roma inclusion by 2008, based on the recognition that an exchange of good practice and cooperation was badly needed. The platform developed 10 common basic principles on Roma inclusion one of which was calling for a transfer of evidence-based policies (European Roma Platform, 2009).

In light of our results, central governments are not well positioned to plan and implement nationwide Roma programmes and projects on housing due to lacking knowledge of local needs and community stakeholders, a lack of interest in and accountability for systematic evaluation of interventions that are related to lacking support from the majority for positive discriminatory actions, and correspondingly, a lack of political will. In addition, central governments necessarily favour 'top-down' approaches for Roma programmes, which, by ignoring contextual factors and conditions, render the impact of their projects minimal (Kropiwnicki and Deans, 2006).

The importance of housing in terms of health was underlined by the recent report of the Commission on Social Determinants of Health – its first recommendation being the improvement of daily living conditions in order to reduce health inequalities. Unequal living conditions are the consequences of poor social policies and programmes, unfair economic arrangements, and bad politics (CSDH, 2008). Accordingly, policy makers are best positioned to

Health impact assessment of Roma housing policies in Central and Eastern Europe: a comparative analysis

improve the health of the poor, among them Roma. An unaddressed question is which level of policy making should be responsible for what in terms of Roma housing. In light of our comparative analysis, it is highly recommended that the principle of subsidiarity be applied for Roma housing projects (as well). That is, political decisions on housing for Roma should be taken at the lowest possible level, and as close to the citizens (Roma people included) as possible. HIA is a potentially useful tool for decision makers to plan Roma housing projects but we concur with others (Bekker, 2007; Harris-Roxas and Harris, 2010) that HIA is more relevant when a specific policy with its concrete actions is investigated at the implementation level rather than at the strategic policy level. Prospective HIA may be useful to mitigate negative and enhance positive effects of housing projects for vulnerable groups if the recently formulated 10 common basic principles for Roma inclusion – especially the involvement of regional and local authorities, civil society, and active participation of Roma – are taken seriously for HIAs as well (European Roma Platform, 2009).

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Health impact assessment of Roma housing policies in Central and Eastern Europe: a comparative analysis

Table 1 Summary of the programmes

Programme / Responsible agency	Aims	Beneficiaries (No. of communities & people)	Duration	Budget
“National Programme for Improvement of the Living Conditions of Roma in the Republic of Bulgaria” (Bulgarian Council of Ministers 2004)	<ul style="list-style-type: none"> • Infrastructure developments in Roma neighbourhoods • Finding alternative locations for some settlements • Building new low-income housing from the state budget (30,065 new houses) • Changing the spatial development of segregated Roma areas. 	412,500 people (approximately 85,900 households), who live in 100 neighborhoods in 88 towns.	2005-2015	600,300,000 EUR
“Long-term Housing Concept for Marginalized Groups of the Population and its financing Model” (Government of the Slovak Republic 2005).	<ul style="list-style-type: none"> • Construction of low income housing • Facilitation of renovation, • Legalization of existing settlements & clarification of property issues 	Roma people in Slovakia	2005-2015	360,000,000 EUR
“Programme for Vilnius Roma Community and Maintenance of Territories near the Tribe and Safety Insurance and Reduction of Roma Segregation” (Council of Vilnius City Municipality, 2005).	<ul style="list-style-type: none"> • Ensure safety of territories at the Vilnius Kirtimai community and around it • Reduction of Roma segregation • Prevention of drug and psychotropic substance abuse 	511 persons (Kirtimai community)	2005-2010	636,730 EUR
“Housing and social integration programme of Roma colonies” (Hungarian Ministry of Youth, Family, Social Affairs and Equal Opportunities, 2006)	<ul style="list-style-type: none"> • Improve housing conditions • Improve access to educational, social and health care of Roma living in colonies in nine rural settlements 	Roma communities of 9 settlements (11.415 inhabitants) invited to apply for funding 4.492 Roma people of 1.012 colony households	2005-2006	2,615,000 EUR

Health impact assessment of Roma housing policies in Central and Eastern Europe: a comparative analysis

Table 2. Methods of HIAs

Intervention	HIA type	HIA timing	Data collection techniques	Interviewees / informants
National level housing programme in Bulgaria	Standard	Concurrent	Structured interviews (7 topics)	Representatives of national Roma NGOs, Ministry of Regional Development and Public Works, Ministry of Labour and Social Policy, Ministry of Finance, Ministry of Health, Sofia municipality, health professionals (15 persons)
			Focus groups	Roma representatives of civil organizations, workers of Sofia municipality, members of the Association of the Municipalities in Bulgaria
			Document review	HIAs on previous housing projects, policy documents on the programme, literature on housing and health
National level housing programme in Slovakia	Standard	Concurrent	Interview	Members of the National Council (parliament) of Slovakia, public health experts of the Faculty of Health Care and Social Work of Trnava University, experts of the Regional Institute of Public Health of Trnava Region, Roma representatives of national Roma organizations
			Focus group	health professionals, Roma representatives of local Roma organizations
			Document review	HIAs on previous housing projects, policy documents on the programme, literature on housing and health
Municipal level housing programme in Vilnius, Lithuania	Standard	Concurrent	Field visit	Vilnius Kirtimai Roma Community Centre; Kirtimai community
			Interview	Experts of the Department of National Minorities and Lithuanians Living Abroad under the Government of Lithuania; president of the Roma NGO “Gypsy Fire”; leaders of Vilnius Municipality and relevant departments and divisions responsible for the Program implementation; Centre of Ethnic Studies, Institute for Social Research; Human Rights Monitoring Institute; Lithuanian Children Fund; Ombudsperson of the Office of Equal Opportunities
			Questionnaire (29 items)	Families with small children living in Kirtimai
			Document review	HIAs on previous housing projects, policy documents on the programme, literature on housing and health
Local level	Compre-	Retro-	Field visit	Hencida, Hajdú-Bihar county

Health impact assessment of Roma housing policies in Central and Eastern Europe: a comparative analysis

housing project in Hencida, Hungary	hensive (standard+ evaluation)	spective	Interview	Mayor of Hencida, president of Hencida Roma self government, coordinator of the project, vice director of the local school, field workers of the local child help service and the local family help service, director of the kindergarten, general practitioner of the village, district nurse, 5 members of beneficiary Roma families
			Questionnaire (42 items)	Adult members of 17 beneficiary families
			Document review	HIAs on previous housing projects, policy documents on the programme, literature on housing and health

Health impact assessment of Roma housing policies in Central and Eastern Europe: a comparative analysis

Table 3 Results of screening: Actions and measures of national programmes in light of their health impacts

	BGR	LTU	HUN	SVK	Probability of health impact ¹	Direction and magnitude of health impact ²
Administrative measures						
Legalization of existing settlements	✓			✓	possible	+
Clarification of property issues			✓	✓	possible	+
Preparation of detailed layout plans for the subsequent housing construction	✓	✓			possible	+
Designation of lots for housing constructions				✓	possible	+
Definition of principles concerning allocation of dwellings				✓	definite	+++/--
Infrastructural development						
Construction of new dwellings (rental housing, social housing)	✓	✓	✓	✓	definite	+++/-
Renovation of existing dwellings	✓	✓	✓	✓	definite	+++/-
Construction/development of technical infrastructure	✓	✓	✓	✓	definite	+++/-
Supplementary measures						
Education and training		✓	✓		definite	+++
Complete and partial employment		✓	✓		definite	++
Health care, social care and support	✓	✓			definite	+
Prevention of crime, drug and psychotropic substance abuse		✓			probable	++

¹Likelihood (definite/probable / possible / speculative)

²Direction (*positive / negative*)

Magnitude/severity (low, medium, high = +, ++, +++/-,--,---)

Health impact assessment of Roma housing policies in Central and Eastern Europe: a comparative analysis

Table 4 Summary of health impacts of programmes

Countries	Category of health determinant																											
	Physical environment										Access to and quality of services	Socio-economic environment										Lifestyle						
	Outdoor conditions					Indoor conditions																						
	Air	Water	Soil	Built environment	Traffic	Indoor air	Dampness & mould	Temperature & warmth	Public utilities	Crowdedness	Rodents & parasites	Housing safety	Helper services	Health care	Income	Employment	Education	Social network	Crime & fear of crime	Recreation	Privacy	Housing tenure	Housing satisfaction	Neighbourhood satisfaction	Housing expenses	Nutrition	Risk behaviour	Coping with stress
BGR, LTU, SVK	+/•	+	+	+	+/•	+	+	+	+	+/•	+/•	+	+	+	+/•	+/•	+/•	+	+	+	+/•	+/-	+	+	+/-	+/•	+/•	+/•
HUN	•	+	+	+	•	+	+	+	+	•	+	+/-	•	•	•	•	+	-	•	+	•	+	-	-	-	•	•	•

Positive impact:
Negative impact:
No impact:
Different direction of impacts

+
-
•
+/-